PMH39

COST-EFFECTIVENESS OF PREGABALIN VERSUS USUAL CARE IN REFRACTORY OUT-PATIENTS WITH GENERALIZED ANXIETY DISORDER: A NESTED-CASE-CONTROL ECONOMIC EVALUATION UNDER USUAL MEDICAL PRACTICE IN MENTAL HEALTH CENTERS

Alvarez E[1], Carrasco JL[2], Olivares JM[3], Ferro MB[4], Pérez M[4], Rejas J[5]

[1]Santa Creu i Sant Pau Hospital, Barcelona, Spain, [2]Hospital Clínico San Carlos, Madrid, Spain, [3]Hospital Meixoeiro – Complejo Hospitalario Universitario de Vigo, Vigo, Pontevedra, Spain, [4]Pfizer Spain, Alcobendas (Madrid), Spain, [5]Pfizer Spain, Madrid, Spain

OBJECTIVES: To carry-out a cost-effectiveness analysis (CEA) of the effect of Pregabalin (PGB) versus usual care in refractory out-patients with Generalized Anxiety Disorder (GAD) treated according with usual medical practice in Mental Health Centers in Spain. **METHODS:** CEA was carried-out by means of a nested case-control design which used secondary data extracted at random from a 6-month cohort prospective observational study (the ADAN study) conducted to ascertain cost-of-illness in GAD (DSM-IV criteria). Refractory subjects were those who claimed of persistent symptoms of anxiety and showed suboptimal response (HAM-Anxiety scale ≥ 16) after a course of standard doses of any anti-anxiety drug, alone or in combination, for 6 months. At baseline, patients could switch to PGB (monotherapy or add-on) or to usual care, alone or in combination, which were considered cases and controls respectively. Health outcomes included quality-adjusted life years (QALYs) gain by EQ-5D. A 3rd-payer perspective was chosen for the CEA analysis in year 2009. Sensitivity analysis was performed by bootstrapping techniques (10000 re-samples were obtained) in order to obtain a cost-effectiveness acceptability curve. **RESULTS:** A total of 858 refractory subjects (mean baseline HAM-A; score 25.7) were identified; 429 in each of the PGB and UC group. Compared with UC, PGB was associated with significant higher QALY gain after 6 months of treatment; 0.1225+0.0995 vs 0.1009+0.0938 ($p = 0.001$), but significantly increased health care costs; €1,240.6+1,407.4 vs €931.4+940.2 ($p < 0.0001$). The deterministic ICER ratio was €14,287 per QALY gained with a re-sampling ICER of €15,804 (95 CI: 15,064–16,545). The 90% of re-samples fold below €25,052 threshold and 95% ≤ €30,000. **CONCLUSIONS:** Despite the design of the primary study, this evaluation could suggest that pregabalin may be cost-effective in comparison with usual care in refractory out-patients with Generalized Anxiety Disorders managed in Mental Health Centers under usual medical practice in Spain.

PMH40

COST-EFFECTIVENESS ANALYSIS OF THE INCREDIBLE YEARS PARENT PROGRAM AS A PREVENTIVE INTERVENTION

Posthumus J[1], Mangen MJ[1], Raaijmakers M[1], De Wit GA[2], van Engeland H[1], Matthys W[1]

[1]University Medical Center Utrecht, Utrecht, The Netherlands, [2]National Institute for Public Health and the Environment, Bilthoven, The Netherlands

OBJECTIVES: Aggressive behavior in early childhood affects daily life of both, the children and their surroundings, resulting in serious economic implications to society. This study analyses the cost-effectiveness of the Incredible Years (IY) parent program, a **manualized behavioural parent training aiming at the improvement of parenting** skills in order to reduce child aggressive behaviour -, compared to care as usual (CAU) in preschoolers at risk of a chronic pattern of conduct problems. **METHODS:** Data was collected on intervention costs and for both groups at different moments in time (before intervention, after intervention, one- and two-year follow-up) on effects (observed *Negative Child Behavior*) and on costs due to the use of public services, child's damage, travel costs and productivity losses. A cost-effectiveness study was conducted using different perspectives that were public authorities, parent and society. **RESULTS:** Children from the IY parent program, in comparison to CAU, had a significant larger decrease on *Negative Child Behavior*. An effect that was even larger if taking only children with severe aggressive behavior. The monetary benefits per child were larger than the intervention costs, taking the society's perspective and the parent's perspective respectively. However, from the public authorities' perspective, **the net** costs per child to reduce the *Negative Child Behavior* score by one were €106. **Basic** program (12 sessions in place of 18), social worker as trainer (psychologist in baseline), not considering informal help resulted in better a CER compared to baseline, whereas costs for recruiting, parking fees and the inclusion of loss of leisure time would. **CONCLUSIONS:** Seen from the society's perspective, the intervention is unambiguously dominant over CAU. Children from the IY parent program had a significant larger decrease on *Negative Child Behavior* than those from the CAU condition. And from the society's perspective the IY parent program was even cost-saving.

PMH41

COST-EFFECTIVENESS ANALYSIS OF ANTI-PSYCHOTICS BY ROUTE IN SCHIZOPHRENIA

Kim BRM, Yang BM, Lee TJ

Seoul National University, Seoul, South Korea

OBJECTIVES: To assess the cost effectiveness of risperidone LAI compared with oral risperidone and oral olanzapine over a 1-year time period in outpatient with schizophrenia who had previously suffered a relapse requiring hospitalization as south Korea health care system. **METHODS:** Published medical literature and hospital electronic data were used to populate a decision-analysis model comparing the three treatment alternatives. The model captures: rates, frequency, duration of hospitalization, stable days(duration of out-patient follow-up) that health care resource utilization and associated costs. Primary outcomes were: the proportion of patient re-hospitalization; the frequency of hospitalization per patient; the number of hospitalization days per patient; the number of stable days and total direct and indirect cost per patient per years. Costs are in year 2007 Korea Wons. **RESULTS:** Based on model projections, the proportions of patients experiencing re-hospitalization after 1 year treatment were 19.0% for risperidone LAI, 25.0% oral olanzapine and 26.6% for oral risperidone, respectively. The mean number of days of re-hospitalization per patient per year was 16.6 for risperidone LAI, 21.9 oral olanzapine and 23.1 for oral risperidone, respectively. This would translate into total cost savings with risperidone LAI compared with oral olanzapine of 46,011, while oral risperidone more spend 78,905 respectively. The result of sensitivity analyses, patients re-hospitalization rate during 6-month treatment were total cost savings with risperidone LAI compared with oral risperidone and oral olanzapine. When drug cost of risperidone LAI, reducing 30% and 75%, compared with oral risperidone and oral olanzapine are cost-effective medicine. **CONCLUSIONS:** The use of risperidone LAI for treatment of outpatient with schizophrenia is predicted in this model to result in better clinical outcomes but higher total health care costs over 1 year than its comparators, oral risperidone and oral olanzapine. Risperidone LAI may therefore be carefully therapeutic option for outpatients with schizophrenia in the republic of Korea health care setting.

PMH42

COST-EFFECTIVENESS ANALYSIS OF OLANZAPINE LONG-ACTING INJECTION COMPARED WITH RISPERIDONE LONG-ACTING INJECTION IN THE TREATMENT OF SCHIZOPHRENIA IN NORWAY

Carroll SM[1], Jemiai N[2], Suter B[3], O'Donohoe P[4], Skjoldborg U[5], Moller J[1], Kleivenes OK[3], Novick D[6]

[1]United BioSource Corporation (UBC), London, UK, [2]Eli Lilly and Company, Erl Wood ELCL, UK, [3]Eli Lilly Norge A.S, Oslo, Norway, [4]United BioSource Corporation (UBC), London , UK, [5]Eli Lilly, DK—2800 Lyngby, Denmark, [6]Eli Lilly and Company, Windlesham, Surrey, UK

OBJECTIVES: To assess the cost-effectiveness of olanzapine long-acting injection (OLAI) compared with risperidone long-acting injection (RLAI) for patients with schizophrenia in Norway. **METHODS:** A discrete event simulation (DES) model was developed from a Norwegian health care system perspective to estimate the costs and outcomes associated with OLAI vs. RLAI for patients with schizophrenia over a five year period. The model focuses on patients that have been non-adherent to oral medication resulting in recurrent relapses. These patients responded to oral treatment during the stablisation phase of their illness and have been modeled as entering the maintenance phase of treatment. DES was considered an appropriate approach due to the heterogeneous nature of schizophrenia. Norwegian unit cost and resource utilisation data were used. Key clinical inputs were relapse rates and treatment discontinuation rates obtained from open-label studies. Occurrences of side-effects, such as post-injection syndrome, were accounted for. Cost and outcomes included direct medical costs and quality-adjusted life years (QALYs) discounted at a rate of 4%. A range of deterministic and probabilistic sensitivity analyses were conducted. **RESULTS:** Results were analysed over a 5-year time horizon. OLAI was found to be dominant over RLAI. Incremental costs and outcomes were −63,323 NOK (−€7,085) and 0.07 QALYs. OLAI was associated with fewer relapses (1.41 vs. 1.81 for RLAI) and a longer time on treatment (3.98 years vs. 3.69 years for RLAI). Base case results were most sensitive to changes in the relapse and treatment discontinuation rates, the cost of relapse, and the time horizon. Probabilistic results confirmed OLAI's dominance over RLAI. **CONCLUSIONS:** The economic evaluation indicates that OLAI is highly cost-effective compared to RLAI. As an efficacious and well-tolerated treatment, OLAI constitutes an important maintenance treatment option for patients with schizophrenia experiencing recurrent relapse and previously struggling with adherence to oral medication.

PMH43

THE COST-EFFECTIVENESS OF QUETIAPINE XR IN THE PREVENTION OF RELAPSE AND HOSPITALIZATION IN SCHIZOPHRENIA

Karamustafalioglu O[1], Ozdemir O[2], Kalo Z[3]

[1]Sisli Etfal Hospital, Istanbul, Turkey, [2]Yorum Consultancy Ltd, Istanbul, Turkey, [3]Eotvos Lorand University, Budapest, Hungary

OBJECTIVES: Compliance with pharmacologic treatment in schizophrenia is directly associated with the successful control of the condition. The objective of this study is to estimate the cost-effectiveness of quetiapine XR in the treatment of schizophrenia compared to paliperidone (ER) and quetiapine IR. **METHODS:** Model: A Markov model, with three disease states (mild, moderate and severe) was constructed with a time horizon of 1-year, based on *Edwards 2005*. The analysis was performed from the Turkish health care payer perspective. Patient group: Adult patients with schizophrenia receiving treatment. Data sources: Clinical data were acquired from local and international literature. Resource use data were provided by an expert panel. Prices of medications and other costs related to treatment of schizophrenia were obtained from the Ministry of Health Drug Price List in November 2008, and the Price Lists of Social Security Institution in 2008, respectively. Outcomes: Clinical outcome was defined as the number of relapses and hospitalizations within one year period. Economic outcome was the calculated annual cost of disease. Only direct medical costs, i.e. treatment, laboratory examinations and health care, were considered. **RESULTS:** Total annual cost of disease is €1.450 for quetiapine XR, lower as compared to quetiapine IR (€1.653), quetiapine IR pool (€1,606) and paliperidone (€1.898). Annual hospitalizations rate is 1149 for quetiapine XR and paliperidone, and 1174 for quetiapine IR. Annual relapse rate is 2569 for quetiapine XR and paliperidone, and 2623 for quetiapine IR. Quetiapine XR, with its lower cost, is superior to paliperidone on cost-minimization manner. Quetiapine XR has dominated quetiapine IR on cost-effectiveness manner. Sensitivity analyses prove that results are quite